

One year of the Abdul Latif Jameel Institute for Disease and Emergency Analytics

Annual report – Executive Summary
December 2020

The Abdul Latif Jameel Institute for Disease and Emergency Analytics (the Jameel Institute) was launched in October 2019 with the mission to combat disease threats worldwide. Bringing together researchers working in global health within Imperial College's School of Public Health and partnering with governments and international institutions, the Jameel Institute advances methods and real-world application of data analytics to identify and support effective actions and investment into population health globally. Shortly after our Institute was launched, the world faced an unprecedented pandemic which catapulted the Jameel Institute into the global spotlight. We are delighted to share the work of the Institute in our [annual report](#) and have summarised our achievements and work to date below.

Our research

The Jameel Institute has three main research themes: **responding to health emergencies**, **strengthening health systems** and **building partnership and capacity**.

Responding to health emergencies

In its first year, the Jameel Institute has concentrated on the emergency response to COVID-19. We recognised the seriousness of the crisis in mid-January 2020 when a small, rapidly convened team, developed models with data from cases in China to help forecast the potential impact on the UK and other countries. By the time the World Health Organisation (WHO) declared SARS-CoV-2 a global pandemic in March 2020, the Imperial College COVID-19 Response Team was established, under the umbrella of the Jameel Institute. By November 2020, the team had produced 39 reports, eight tools and 21 publications.

The [COVID-19 reports](#) provide timely evidence to inform our partners in governments around the world, on the optimal policies to control the pandemic, mitigate adverse social and economic impacts, ensure a more resilient health systems response, and protect those most vulnerable. At the forefront of delivering timely analysis of the SARS-CoV-2, the Jameel Institute informed, and continues to inform, national and international policy response.

“There has never been a time when an Institute like ours has been more relevant, necessary and important.”

PROFESSOR ALICE P. GAST, PRESIDENT,
IMPERIAL COLLEGE LONDON

Strengthening health systems

Health systems have been tested during this period and through our relationships, the Jameel Institute has been able to advise governments and help health systems manage during this crisis. The Institute's deputy Director, Dr Katharina Hauck, worked on helping health systems cope better with the COVID-19 pandemic and investigated how hospitals can increase their capacity fast to treat the surge of patients requiring lifesaving treatment. One example is the hospital planning tool, which calculates how much capacity for the urgent treatment of COVID19 patients (in terms of beds, staff, and ventilators) can be obtained with targeted interventions such as cancelling elective surgeries and re-organising care.

Outside of our COVID-19 work, Professor Majid Ezzati, Research Lead for the Jameel Institute, published a [report](#) revealing that around the world, the mortality rates from chronic diseases such as diabetes, lung cancer, colon cancer and liver cancer are declining too slowly (or worsening in some countries) with the United States, China, and the United Kingdom among a number of nations falling behind on global targets to cut premature deaths.

Building partnerships and capacity

We have harnessed relationships established over the years to provide information and tools to help plan and manage local responses to contain the COVID-19 pandemic.

The Jameel Institute created short videos with experts responding to COVID-19 to provide real-time updates on the disease status and the potential impact, which was part of our course materials for [‘Science Matters: Let’s Talk about COVID-19’](#). Participants heard directly from researchers at the Jameel Institute and other research institutes about the theory behind the analyses of COVID-19 and its spread, while learning how to interpret new information using the core principles of public health, epidemiology, medicine, health economics and social science.

The Jameel Institute – a Centre of Excellence

Within our first year, the Jameel Institute has quickly become a Centre of Excellence. We have strengthened partnerships with international organizations, governments, research institutions and communities, to develop practical and effective long-term solutions, shape health policy and deliver better quality of life for all. The Institute has well established links across the College, for example with the Business School, and is continuing to review potential opportunities with other faculties and departments.

“Our epidemiological models have been vital in informing policy, and our work has been disseminated all over the world.”

PROFESSOR NEIL FERGUSON, DIRECTOR OF THE JAMEEL INSTITUTE, IMPERIAL COLLEGE LONDON

The Jameel Institute’s first anniversary

To mark the first anniversary of the Institute, the team delivered virtual communications and events to showcase the research and impact of the Jameel Institute since its inception in October 2019. Activities included short videos of each research lead of the Executive Committee discussing their vision for the Institute. These videos were used on social media to spotlight each researcher. In addition, the team organised a symposium, bringing together experts who have been responding to or working on the COVID-19 pandemic. Themed ‘Shaping the post-COVID-19 world’, the symposium explored what we currently know about SARS-CoV-2, what are the economic and social impacts, and how can we prepare for the future. Speakers included Sir Jeremy Farrar, Professor Neil Ferguson, Professor Jonathan Haskel, Professor Esther Duflo, Dr Gita Gopinath, Dame Sally Davies, Dr John Nkengasong, and Professor Peter Smith. A total of 863 people from 53 countries joined the symposium which included MPs, policy makers, academics and NGOs.

We have been living through unprecedented times due to the COVID-19 pandemic and our Institute was established for precisely this kind of health emergency. See our [full annual report](#) for further information, including a full list of our publications.